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STUDIES ON THE FAUNA OF CURAÇAO  
ARUBA, BONAIRE AND THE  
VENEZUELAN ISLANDS:

No. 14

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STUDIES ON THE FAUNA OF CURAÇAO, ARUBA,  
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**ANTS FROM THE LEEWARD GROUP AND  
SOME OTHER CARIBBEAN LOCALITIES**

by

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The smaller islands of the Caribbean Sea support relatively few species of ants. Even in the largest island in the West Indies, Cuba, there were in 1934 only about 90 forms (species, subspecies and „varieties”) known and this number has not been greatly increased since. During the 1930's there were recorded in the entire West Indies some 450 forms and at the present time the number can hardly much exceed 500. By way of comparison, the most recent enumeration of ants of the United States (1947) shows 742 kinds. The larger proportion of these West Indian ants occur on such islands as Hispaniola which offer varied and stable habitats. The small islands have relatively few species and these are in the large part common tropicopolitan forms which tend to drive out the endemic species. Few endemic species appear to remain in the Lesser Antilles, for example.

Although dr HUMMELINCK told me he was not trying to gather representative material — especially on the islands of Curaçao, Aruba and Bonaire, in which collecting has been done in 1930 by dr H. J. MACGILLAVRY and the late dr L. W. J. VERMUNT — the present collection is of particular interest since it was made on many small islands whose ant fauna was hitherto completely unknown. A few records from the adjacent mainland and some other localities are also included (see Table 7). The value of the Caribbean records is enhanced by the fact that ant populations on small islands may tend to vary from time to time or to be replaced by populations of other species, not to speak of the possibility of speciation itself taking

place in geographically isolated places. They also record the presence of specific cosmopolitan „vagrants” on specific islands and some of these ants are still spreading.

My apologies are due Dr HUMMELINCK for not including all other ant material from these islands present in The Netherlands and I can only plead pressure of other work. I have Caribbean specimens of my own collecting (1933–1938) which I have yet to determine.

Most of the localities are shortly described in the lists given by HUMMELINCK in the 1st and 4th paper of this series (1940 vol. I p. 32–37, vol. II p. 22–42), and are indicated on the maps published by that author.

## PONERINAE

### *Ectatomma* (E.) *ruidum* Roger

MARGARITA: Stat. 140, Foot of the Cerro del Piache, S.E. of El Valle, 10.VII.1936, ♀; Stat. 153, Gaiquire, N.E. of Porlamar, 8.VII.1936, ♀. TESTIGOS: Stat. 157, Morro de la Ignana, 14. VI.1936, ♀. GOAJIRA: Cabo de la Vela, 22.I.1937, ♀; Stat. 294, S. of Rio Hacha, 18.I.1937, ♀.

A common species of potential economic importance (see WEBER, 1946, *Proc. Ent. Soc. Washington* 48, p. 1–16). Known from Southern Mexico to Brazil. Commonly about cultivations and nesting in soil. Predatory on insects and other small animals as well as tending *Homoptera*.

### *Ectatomma* sp.

SURINAME: River-jungle at Belwaarde, near Paramaribo, 3.V.1936, ♀.

### *Ponera* *trigona* Mayr?

BLANQUILLA: Stat. 172A, Coconut-grove of El Jaque, 22.VII.1936, ♀. Widespread in the Caribbean.

### *Ponera* *opaciceps* Mayr

MARGARITA: Stat. 143, Below the Toma de Agua del Valle, 4.VII.1936, ♀ ♀; Toma de Agua del Valle, 4.VII.1936, ♀ ♀. Widespread in the Caribbean.

### *Ponera* *ergatandria* Forel

CURAÇAO: Pos Sorsaka (near Stat. 86), Zevenbergen, 10.XI.1936, ♀. Widespread in the Caribbean.

TABLE 9.

*Enumeration of the Ants treated in this paper with localities*

[illegible]

## PSEUDOMYRMINAE

### **Pseudomyrma delicatula** Forel

MARGARITA: Stat. 138, El Cerrito, E. of La Asunción, 27.V.1936, ♀.

Frequently considered a form of *P. flavidula* F. Smith. Both are widespread neotropical ants, *flavidula* occurring on various West Indian islands from Cuba to Trinidad. An arboreal ant, nesting in hollow twigs and decidedly wasp-like in its actions.

### **Pseudomyrma flavidula** F. Smith

N.E. VENEZUELAN CONTINENT: Rio Chuspa, E. of La Guaira (near Stat. 1), 30.VII.1936, ♂.

Widespread in the neotropics. Arboreal, nesting in hollow twigs.

### **Pseudomyrma elegans** F. Smith

SURINAME: River-jungle at Belwaarde, near Paramaribo, 3.V.1936, ♂.

### **Pseudomyrma gracilis** Fabr.

SURINAME: River-jungle at Belwaarde, near Paramaribo, 3.V.1936, ♀.

### **Pseudomyrma** sp.

SURINAME: River-jungle at Belwaarde, near Paramaribo, 3.V.1936, ♀.

## MYRMICINAE

### **Pheidole** spp.

MARGARITA: Stat. 144, Toma de Agua del Valle, 4.VII.1936. TESTIGOS: Stat. 160, Angoletta, 15.VI.1936. FRILES: Stat. 167, Puerto Real, 18.VI.1936. ARUBA: Jamanota, 3.I.1937. — Several species represented mostly by unidentifiable workers.

### **Pheidole** sp. near **megacephala**

N.E. VENEZUELAN CONTINENT: St. 125, Peninsula de Puerto Santo, E. of Carúpano, 12.VI.1936, ♂. — A single damaged soldier with depressed mid-occipital region, otherwise resembles *megacephala*.

### **Pheidole megacephala** Fabr.?

CURAÇAO: Stat. 206, Tafelberg St. Barbara, 4.IX.1936; Stat. 218, Kamber di Ventana in cave of Hato, 21.IX.1936; ♂.

A common cosmopolitan species. The present specimens are unusually small.

**Pheidole** sp. near **punctatissima**

N.E. VENEZUELAN CONTINENT: Stat. 123, Península de Esmeralda, W. of Carúpano, 10.VI.1936, ♀.

**Crematogaster** spp.

MARGARITA: Stat. 155, Porlamar, 25.V.1936. TESTIGOS: Stat. 158, Morro de la Iguana, 14.VI.1936. ARUBA: Stat. 250, Kamber di Ventana in cave of Quadirikiri, 9.II.1937; Stat. 268B, Hooiberg, 5.XII.1936; Stat. 271, Seroe Plat, 10.II.1937. PARAGUANÁ: Stat. 279, Carirubana, 15.II.1937; ♀. — Two or three species are included and probably include some form of *C. brevispinosa* Mayr and *C. victima* F. Smith.

**Monomorium floricola** (Jerdon)

BONAIRE: Pos Bronswinkel (near Stat. 44A), 27.III.1937, ♀.  
Cosmopolitan and common about habitations but less so than the following.

**Monomorium pharaonis** (L.)

TRINIDAD: Stat. 295, N. of Tetrón Bay, 7.V.1936, ♀.  
Cosmopolitan and common about habitations.

**Solenopsis geminata** (Fabr.)

N.E. VENEZUELAN CONTINENT: Stat. 121, Cabo Blanco, W. of La Guaira, 19.VIII.1936. TESTIGOS: Pos Inglés, Tamarindo, Stat. 161, 16.VI.1936; Stat. 165, Isla de Conejo, 17.VI.1936. FRAILES: Stat. 167, Puerto Real, 18.VI.1936. ROQUES: Stat. 177, Isla Larga, 26.VII.1936. BONAIRE: Pos Francés near Punt Vierkant (near Stat. 58), 31.III.1937; Pos Boven Bolivia (near Stat. 49), 24.III.1937; Bron Fontein (near Stat. 48), 13.XI.1936, 30.III.1937. GOAJIRA: Stat. 287, Castilletes, 14.I.1937; Stat. 288, Uribia, 17.I.1937. ST. KIRTS: Stat. 296, E. of Bassetterre, 19.III.1937. ST. EUSTATIUS: Stat. 297, N.E. of Oranjestad, 18.III.1937, ♀.

Very common in the American Tropics and the southern United States. Stinging severely and thriving in cultivations and waste land.

**Wasmannia auropunctata** (Roger)

MARGARITA: Stat. 155, Patio at Porlamar, 25.V.1936. CURAÇAO: Hofje of Hato (near Stat. 72A), 13.X.1936. ST. EUSTATIUS: Stat. 297, N.E. of Oranjestad, 18.III.1937. SABA: Stat. 298, The Bottom, 18.III.1937. ST. THOMAS: Stat. 300, Drake Seat, Charlotte Amalie, 16.III.1937, ♀.

Common and widespread Caribbean ant, forming populous colonies in a variety of terrestrial and arboreal sites.

**Leptothorax (Goniothorax) tristani** Emery

MARGARITA: Stat. 136, S.W. slope of the Cerro Guayamuri, Paraguachi, 11.V.1936, ♀.

Taken also on Gasparee Island, Trinidad (N. A. WEBER) where slow-moving, timid workers were crawling up a tree at a height of five feet.

**Tetramorium guineense** (Fabr.)

ST. KITTS: Stat. 296, E. of Basseterre, 19.III.1937, ♀.  
Cosmopolitan. Larger than the following.

**Tetramorium simillimum** (F. Smith)

ORCHILA: Stat. 175, S. W. Huespén, 23.VII.1936. AVES: Stat. 179, 179A,  
Ave de Barlovento, 27.VII.1936, ♀.  
Cosmopolitan, perhaps originally derived from Africa which contains a number  
of subspecies.

**Cryptocerus (Cyathomyrmex) varians** F. Smith

PARAGUANÁ: Stat. 281, W. of St. Ana, 16.II.1937; St. Ana (near Stat. 110).  
16.II.1937. GOAJIRA: Stat. 294, S. of Rio Hacha, 18.I.1937, ♀.  
Widespread in Caribbean region, nesting in twigs.

**Cyphomyrmex rimosus** Spinola

TESTIGOS: Stat. 161, Pos Inglés, Tamarindo, 16.VI.1936. SABA: Stat. 298,  
The Bottom, 18.III.1937, ♀.

Most widespread of fungus-growing ants and found throughout the Caribbean.  
Unique in nature of fungus grown (*Tyridiomyces formicarum* Wheeler), developing  
cheese-like bromatia on insect excrement in irregular chambers under stones and  
wood in damp situations.

**Myrmicocrypta urichi** Weber

MARGARITA: Stat. 143, Below the Toma de Agua del Valle, 4.VII.1936, ♀.  
Described from Trinidad and widely distributed in that island. For an account  
of its biology see WEBER, 1945 (*Rev. de Ent.* 16, p. 23-26). A fungus-grower, nesting  
a few centimeters in the soil and forming a fungus garden in a cell about 40 × 80  
mm. Miscellaneous vegetal material may be used for substrate.

The three following new species of *Mycetophylax* include one taken by dr HUM-  
MELINCK near La Guaira, one taken by myself on the Venezuelan llanos and one  
taken by W. M. MANN in Bolivia. They form a closely related group, of which the  
La Guaira species is much the darkest and the Bolivian species is distinctly the  
largest. They appear near *M. emeryi* Forel of Colombia which WHEELER describes  
as having a postpetiole longer than broad and SANTSCHI describes as having the 8th  
funicular segment much longer than broad. Neither mention the high and sharp  
carina forming the lateral margin of the clypeus in front of the antennal fovea  
which the three new species have in common. Several subspecies of *emeryi* are de-  
scribed from Argentina, one at least from a sandy habitat perhaps like that in  
which the Venezuelan llanos species occurred. As an adaptation to this habitat the  
three new species have about six long fine hairs extending from the anterior clypeal  
margin nearly to the apices of the mandibles, with similar hairs on the underside of  
the mandibles and gular region, which together may act as a kind of psammophore,  
reducing evaporation from the mouth.

***Mycetophylax hummelincki* sp. nov.**

N.E. VENEZUELAN CONTINENT: Stat. 121, Cabo Blanco, W. of La Guaira, 19.VIII.1936. C o t y p e s: three workers, taken by P. WAGENAAR HUMMELINCK, under debris with nearly no plant-decay in a almost desert-like, sandy habitat with scattered small shrubs, at an altitude of about 20 m.

W o r k e r. Length extended 2.3–2.5 mm, of thorax including epinotum 0.85 mm. Head in front view, excluding mandibles, squarish, occipital corners in the form of a rounded right angle, occipital margin emarginate in the middle; anterior clypeal margin straight; eyes convex, situated slightly closer to the anterior clypeal margin than to the occiput; mandibles long, slender, falcate, with 5 teeth of which the apical is distinctly the longest; antennal scapes exceeding occipital corners; 8th funicular joint only slightly if at all longer than broad. Thorax in profile with convex promesonotum, shallow meso-epinotal depression containing a small tubercle, plane basal surface of epinotum and small but distinct epinotal teeth. Mesonotum from above bordered laterally in front and behind by feeble tubercles. Petiole in side view a rounded triangle, half as broad as the postpetiole. Postpetiole slightly broader than long, broader posteriorly than in front, campanulate, posteriorly bituberculate above and emarginate in the middle. Gaster ovate with truncate anterior margin. Legs moderately long and slender. — Densely punctate. Pilosity of numerous, appressed, silvery hairs not obscuring integument, and a fine pubescence on the appendages. About six long, pale yellowish hairs extend from the anterior clypeal margin nearly to the apices of the mandibles; other long hairs occur on the under side of the mandibles and gular region. Color dark brown, appendages paler.

***Mycetophylax bolivari* sp. nov.**

VENEZUELAN CONTINENT: Llanos 17 km N. of Soledad. 27.I.1935, across the Orinoco River from Ciudad Bolivar in the State of Anzoategui. C o t y p e s: several workers, taken by NEAL A. WEBER.

W o r k e r. Length extended 2.6–2.8 mm, of thorax including epinotum 0.94 mm. Head in front view, excluding mandibles, squarish, with anterior clypeal margin feebly convex, otherwise much as in *hummelincki*. Thorax similar, the epinotal teeth slightly longer. Petiole half as broad as the postpetiole, the postpetiole itself slightly broader than long. — Pilosity and sculpturing as in *hummelincki*. Color a light ferruginous, the head a little darker.

The ants formed crater nests in sand near similar craters of *Pogonomyrmex* (*Ephebomyrmex*) *venezuelensis* Weber. The vegetation was predominately *Trachypogon plumosus* and *Curatella americana*.

In the same locality were nests of another fungus-growing ant, *Acromyrmex* (*Moellerius*) *balzani* subsp. *planorum* Weber which used the *Trachypogon* as substrate for its fungus. The *Mycetophylax* may have done likewise.

The outstanding difference between the two Venezuelan ants is their color, the dark brown of the coastal species contrasting sharply with the pale color of the llanos form.



**Mycetophylax glaber** sp. nov.

BOLIVIA: Tumupasa. *H o l o t y p e*: one worker, taken by W. M. MANN.

*W o r k e r*. Length extended 3 mm, of thorax including epinotum 1.08 mm. Head in front view, excluding mandibles, squarish but with sides more convex and occipital emargination much broader than in the preceding; anterior clypeal margin straight; eyes convex, situated closer to the anterior clypeal margin than to the occipital corners; antennal scapes exceeding occipital corners slightly; 8th funicular joint about as broad as long; mandibles with 4 or 5 teeth. Thorax much as in the preceding except that the meso-epinotal impression is more shallow and drawn out; the mesonotal tubercles much feebler and the epinotal teeth lower. The petiole is rounded above, with a dorsal longitudinal impression and is barely half as broad as the postpetiole. The postpetiole is distinctly broader than long and is broadest behind where it is deeply emarginate dorsally and bituberculate. The gaster is narrower than in the preceding species and less truncate anteriorly. Legs long and slender. — Densely punctate on the head, more feebly punctate on the thorax and gaster so as to be sub-lucid. Pilosity of silvery or very pale yellow hairs as in the preceding. Color rather uniformly pale ferruginous as in *bolivari*.

This species is distinctly the largest of the three and the least deeply sculptured.

No species of *Mycetophylax* has hitherto been recorded from Bolivia, from which country in 1938 I listed (*Rev. de Ent.* 9, p. 154–206) 49 forms of fungus-growers.

**Trachymyrmex** sp.

MARGARITA: Stat. 144, Toma de Agua del Valle, 4.VII.1936, ♀.

A small species represented by one worker with postpetiole and gaster missing is related to *T. carib* Weber of Trinidad. It is also closely related to *T. humilis* Wheeler of the same island but differs from the original description of *humilis* in having the anterior clypeal margin emarginate rather than straight, the inferior pronotal spines broad and flattened rather than moderately acute and the petiole longer than high. It is in addition closely related to *T. tucuché* Weber of Trinidad, particularly in the head, but has a less coarsely sculptured thorax.

**DOLICHODERINAE****Dorymyrmex pyramicus** Roger

N.E. VENEZUELAN CONTINENT: Stat. 124, Morro de Esmeralda, W. of Carúpano, 10.VI.1936. BONAIRE: Pos Ichi, Kralendijk (near Stat. 52), 14.XI. 1936. ARUBA: Stat. 256, W. of Savaneta, 5.I.1937, ♀.

Widespread in the Caribbean. The pale, typical form, rather than the dark *niger*, is represented here.

**Tapinoma melanocephalum** (Fabr.)

MARGARITA: Porlamar, in kitchen, 7.VIII.1936. ROQUES: Stat. 178, Cayo de Agua, 26.VII.1936. AVES: Stat. 179, Ave de Barlovento, 27.VII.1936, ♀.

A common tropicopolitan ant, thriving in habitations, where a house pest because of its habit of feeding on fatty foods.

**Azteca** sp.

MARGARITA: Stat. 143, Below the Toma de Agua del Valle, 4.VII.1936.

CURACAO: Stat. 217, Before the cave of Hato, 17.IX.1936, ♀.

A strictly arboreal and neotropical genus which frequently comprises one of the dominant form of animal life in its habitat.

**FORMICINAE****Camponotus** sp.

SURINAME: River-jungle at Belwaarde, near Paramaribo, 3.V.1936, ♀.

**Camponotus** sp.

COCHE: Stat. 129, El Guamache, 25.VI.1936. TESTIGOS: Stat. 158, Morro de la Iguana, 14.VI.1936. PARAGUANÁ: Stat. 281, W. of Santa Ana, 16.II.1937, ♀.

**Camponotus (Myrmobrachys) lindigi** Mayr

MARGARITA: Stat. 136, S. W. slope of the Cerro Guayamuri, Paraguachi, 11.V.1936, ♀. FRAILES: Stat. 166, Puerto Real, 18.VI.1936; Stat. 168, La Pecha, 19.VI.1936, ♀. PARAGUANÁ: Stat. 279, Carirubana, 15.II.1937, ♀. GOAJIRA: Stat. 285, Punta Tucacas near Puerto López, 14.I.1937, ♀; Stat. 290, Cabo de la Vela, 22.I.1937, ♀.

Occurs in Trinidad and on the mainland.

**Nylanderia** sp.

SABA: Stat. 298, The Bottom, 18.III.1937.

**Paratrechina longicornis** (Latr.)

LA GUAIRA: Stat. 121, Cabo Blanco, 19.VIII.1936. MARGARITA: Stat. 156, Isla Blanca, S. of Pampatar, 9.VI.1936. FRAILES: Stat. 166, Puerto Real, 18.VI.1936. ROQUES: Stat. 176, Gran Roque, 25.VII.1936. BONAIRE: Pos Francés near Punt Vierkant (near Stat. 58), 31.III.1937; Pos Boven Bolivia, (near Stat. 49), 24. III. 1937. GOAJIRA: Stat. 288, Uriibia, 17.I.1937; Arroyo de Appará, near El Cardón (near Stat. 113), 27.I.1937, ♀.